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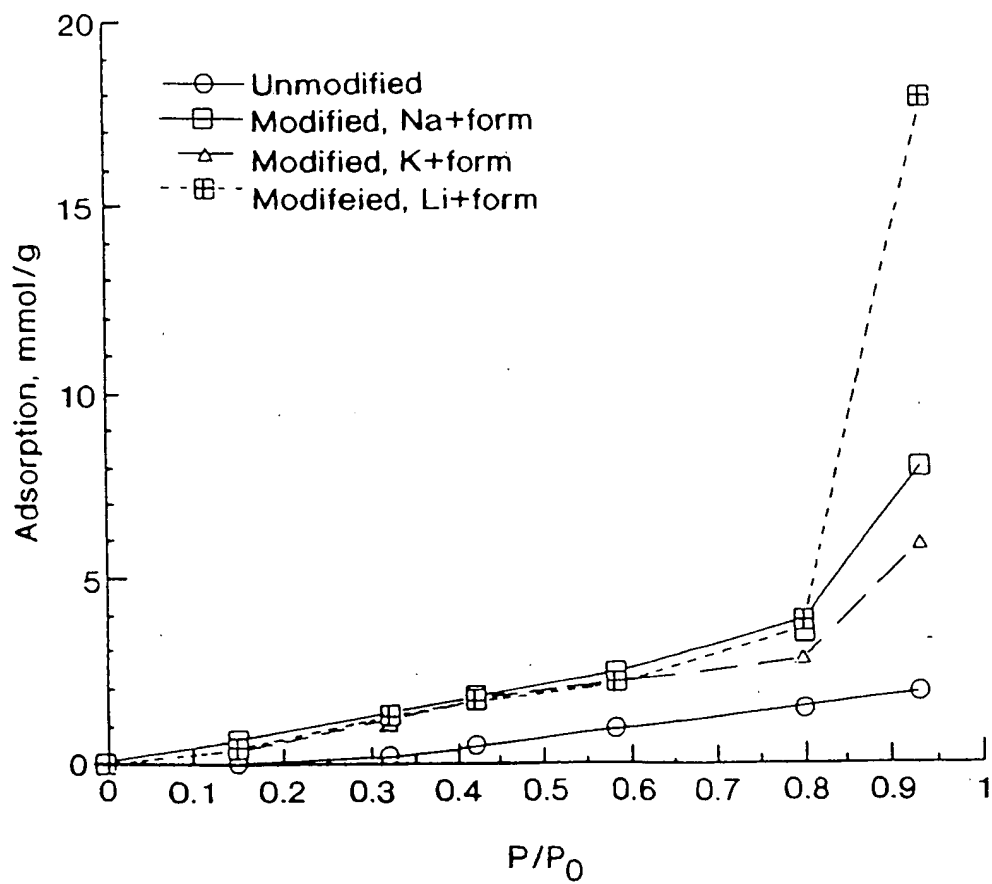


FIG. 1

P/P_0	Unmodified (mmol/g)	Modified, Na ⁺ form (mmol/g)	Modified, K ⁺ form (mmol/g)
0.0	0.0	0.0	0.0
0.15	0.2	2.1	1.5
0.3	1.6	4.4	3.5
0.4	3.2	5.1	4.5
0.58	5.7	6.9	6.0
0.8	9.5	9.4	8.8
0.95	15.0	15.2	13.5

FIG. 2

Figure 1 is a line graph showing the adsorption of water vapor by unmodified and modified polyimide films. The y-axis represents 'Adsorption, micromol/m² surface area' (0 to 100) and the x-axis represents 'P/P₀' (0 to 1). The 'Unmodified' series (open circles) shows a gradual increase in adsorption. The 'Modified, Na+form' series (filled circles) shows a much steeper increase, especially at higher relative pressures.

P/P₀	Unmodified (micromol/m²)	Modified, Na+form (micromol/m²)
0.0	0	0
0.15	0	7
0.32	2	15
0.42	5	20
0.58	11	28
0.79	17	44
0.93	21	88

FIG. 3

Figure 1 is a line graph showing the adsorption of water vapor (in micromol/m² surface area) versus the relative pressure (P/P_0) for two samples: Unmodified (open circles) and Modified, Na+form (filled circles). The modified sample shows a much higher adsorption capacity, especially at higher relative pressures, reaching approximately 110 micromol/m² at $P/P_0 = 0.93$, while the unmodified sample reaches only about 23 micromol/m² at the same pressure.

P/P_0	Unmodified (micromol/m²)	Modified, Na+form (micromol/m²)
0.0	0	0
0.15	0	15
0.32	3	31
0.42	5	37
0.58	9	50
0.78	15	68
0.93	23	110

FIG. 4

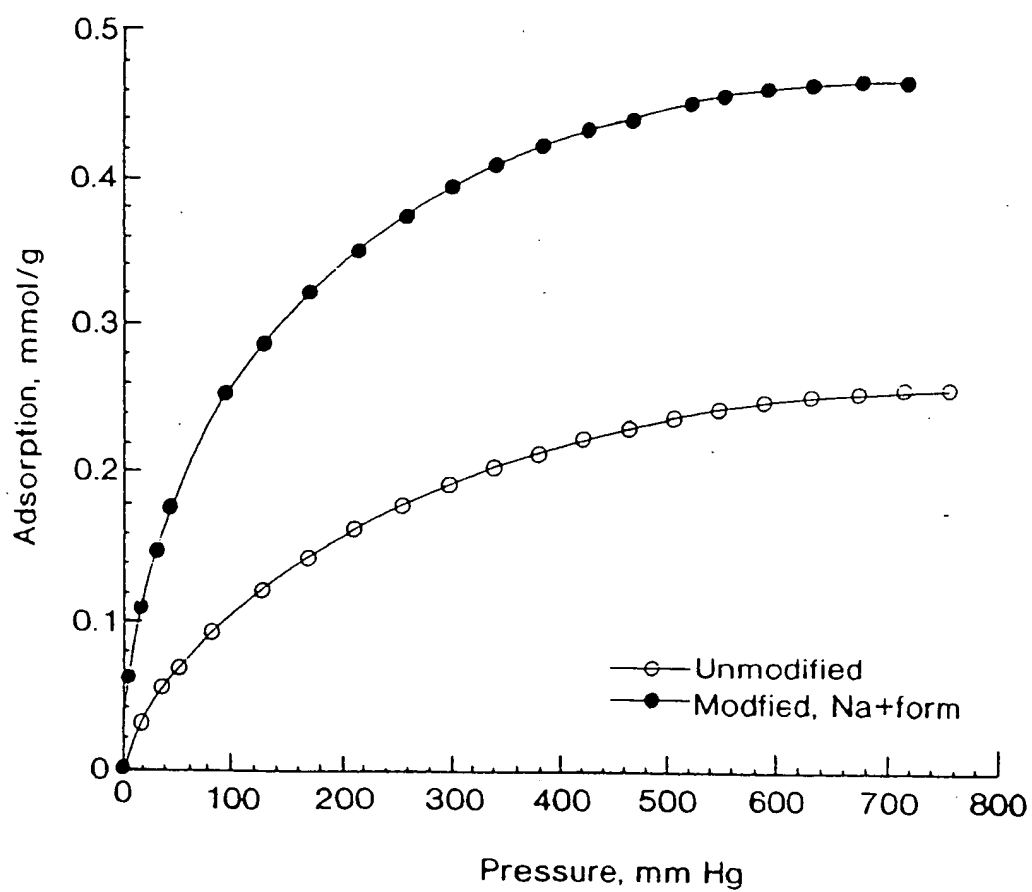


FIG. 5

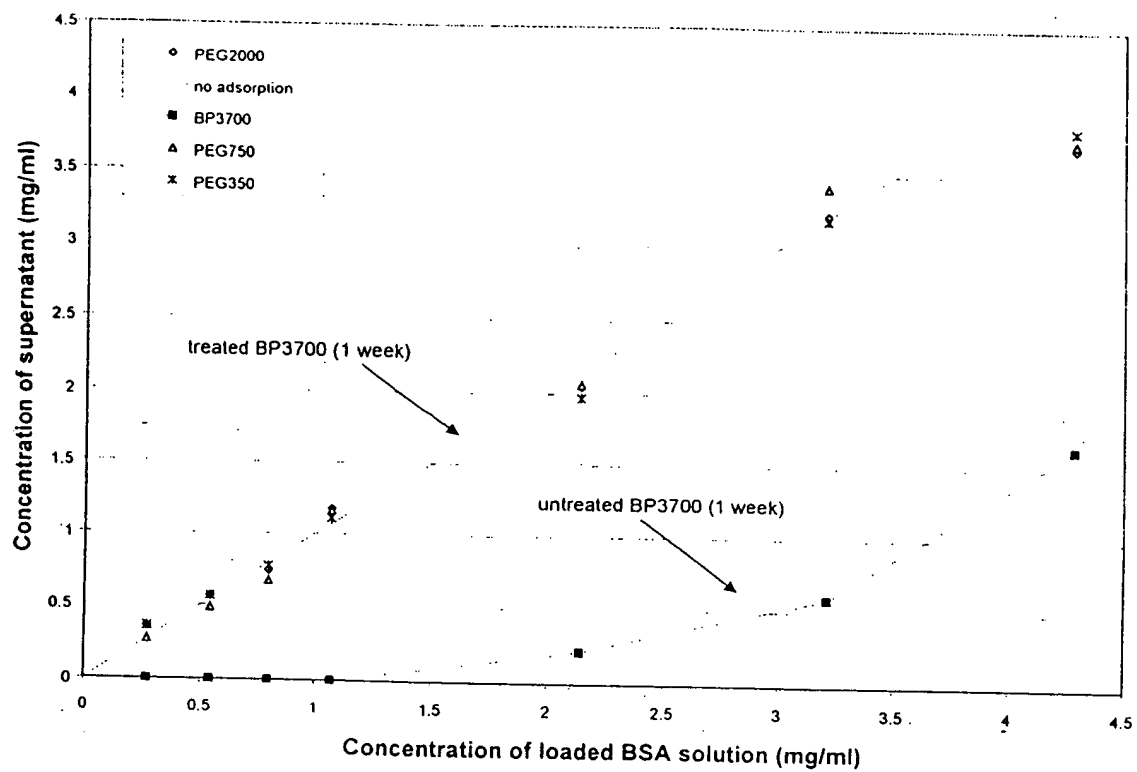
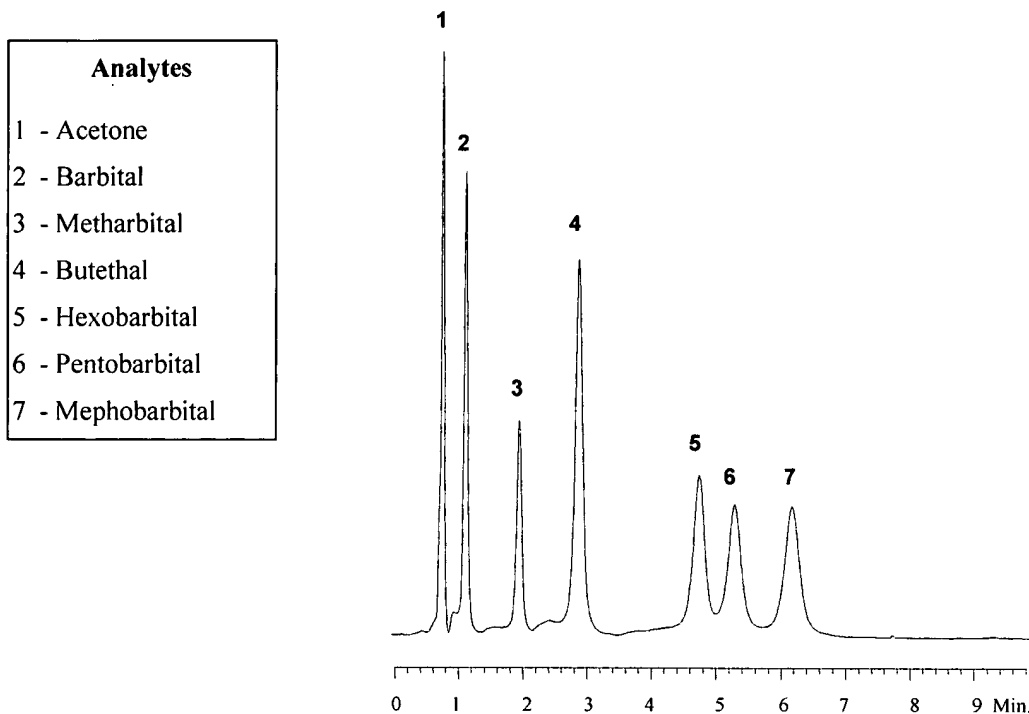


FIG. 6

Separation of Barbiturates



LC Conditions

Column:	50 x 4.6 mm	Temperature:	30 °C
Mobile Phase: 20/80 A/B		Injection volume:	5 µL
A: ACN		Detection:	254 nm
B: 20 mM Ammonium phosphate, pH 7.0			
Flow rate: 1.0 mL/min.			

Figure 7. Separation of barbiturates using a 50x4.6 mm HPLC column packed with SP-2.

Figure 7

Separation of PTH-Amino Acids

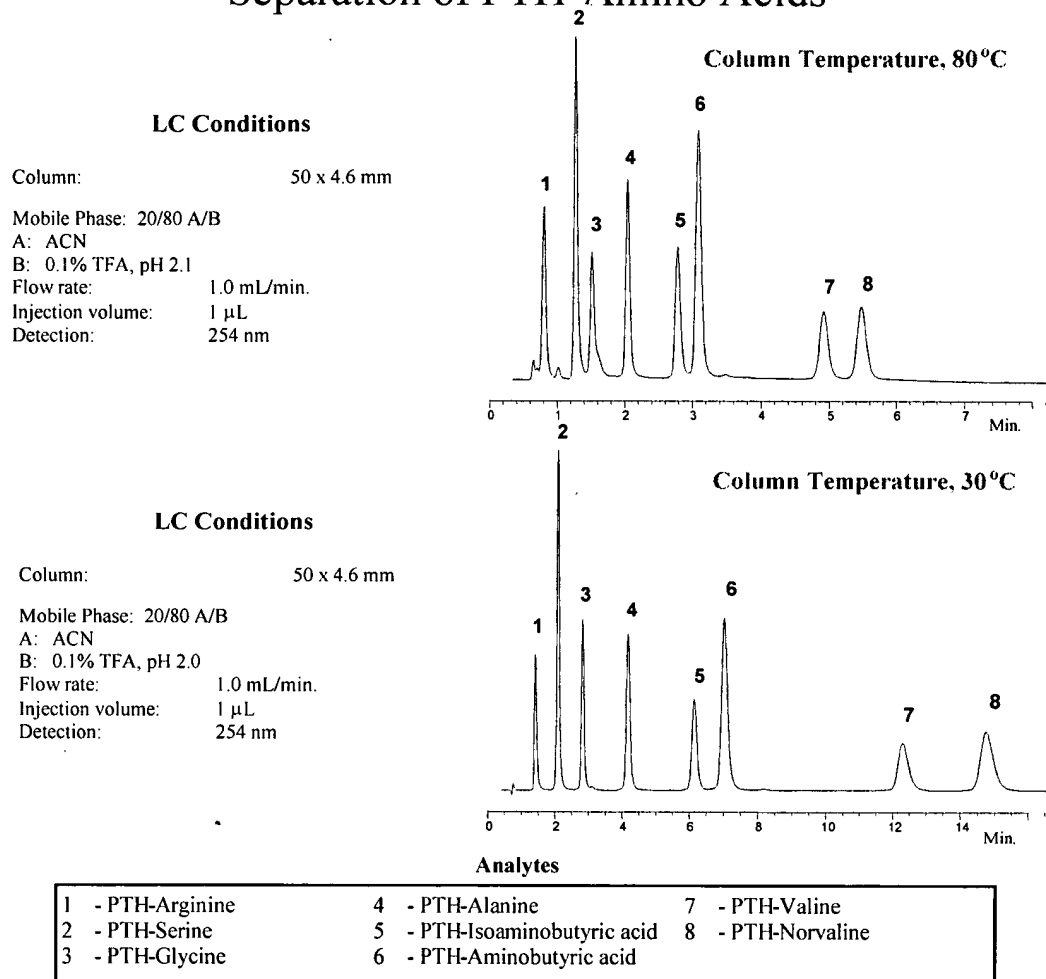


Figure 8. Separation of PTH Aminoacids using a 50x4.6 mm HPLC column packed with SP-2.

Figure 8

Separation of NSAID's

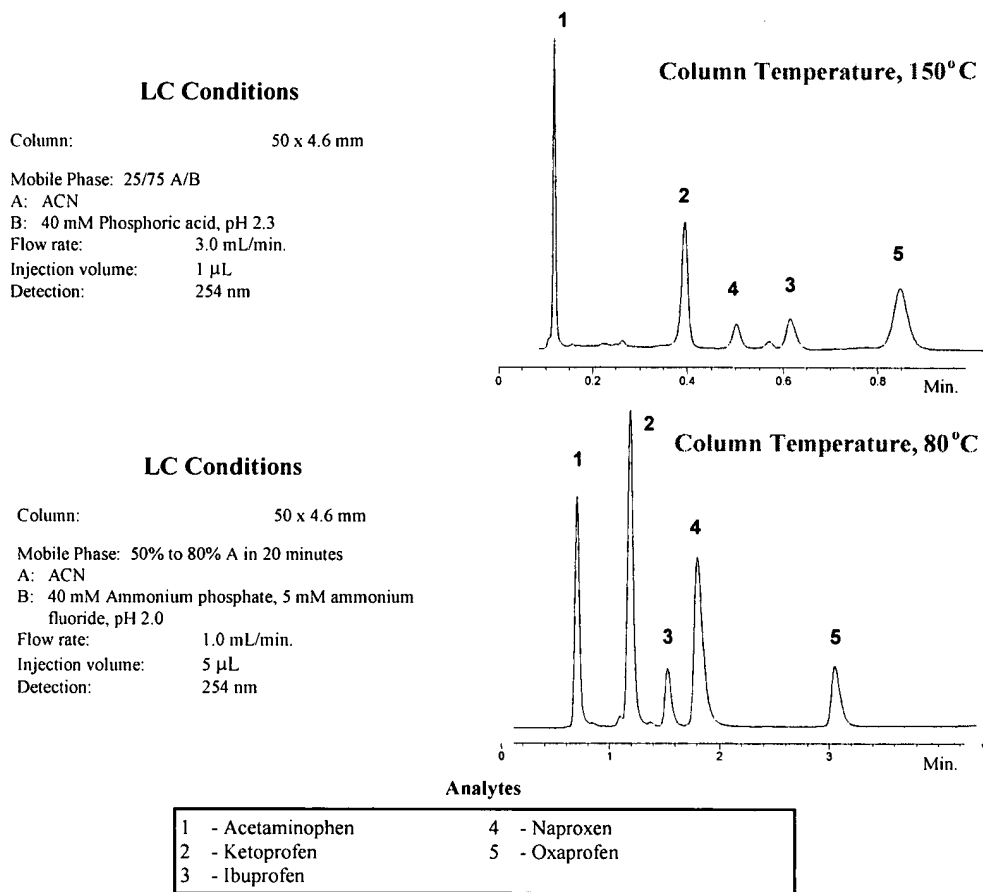


Figure 9. Separation of non steroidal anti-inflammatory drugs using a 50x4.6 mm HPLC column packed with SP-2.

Figure 9

Separation of Ethylbenzene and p-Xylene

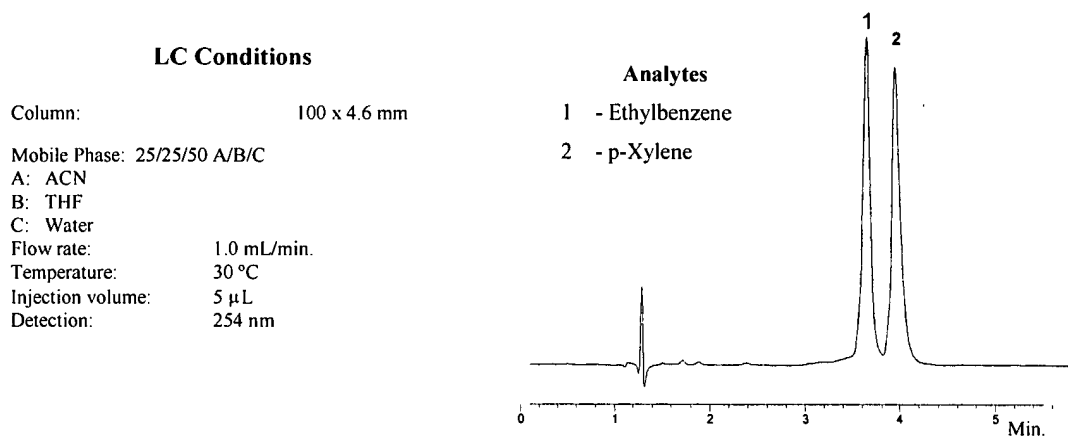
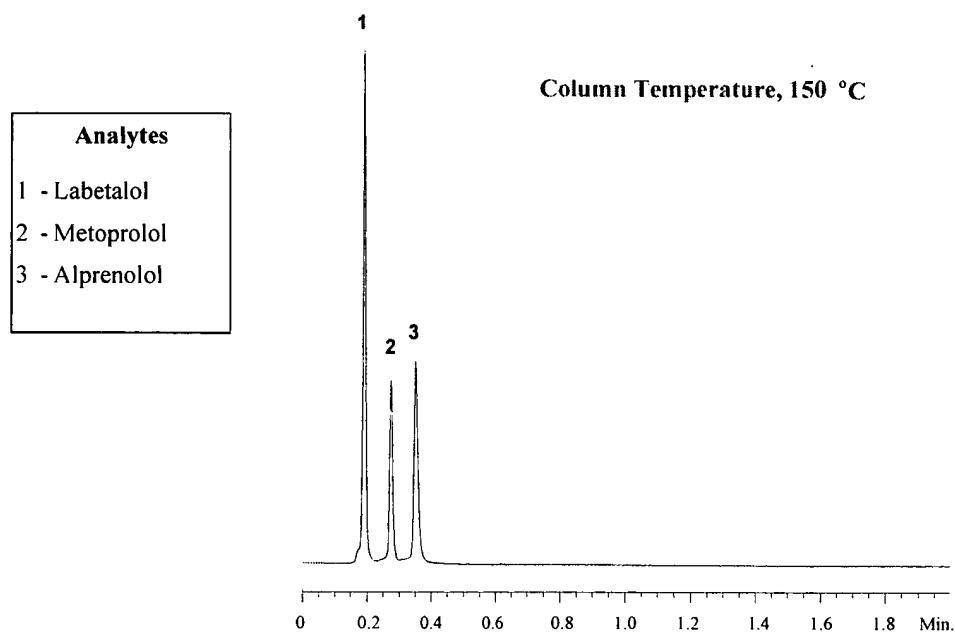


Figure 10. Separation of p-xylene and ethylbenzene using a 100x4.6 mm HPLC column packed with SP-2.

Figure 10

Separation of Beta-Blockers



LC Conditions

Column:	50 x 4.6 mm	Temperature:	150 °C
Mobile Phase:	45/55 A/B	Injection volume	1 µL
A:	ACN	Detection:	210 nm
B:	20 mM Ammonium phosphate, pH 11.0		
Flow rate:	3.0 mL/min.		

Figure 11. Separation of beta-blockers using a 50 x 4.6 mm HPLC column packed with SP-2.

Figure 11